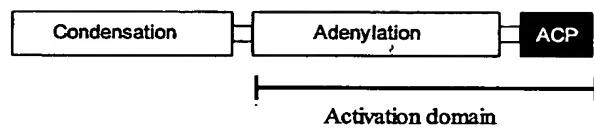


Figure 1: Module of a PPS and subdivision into functional domains

A: Minimal module of a PPS



B: Module with N-methyltransferase domain

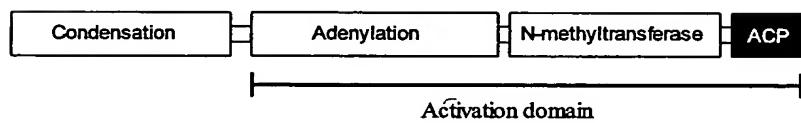


Figure 2: Conversion of activation domains by inserting a N-methyltransferase domain

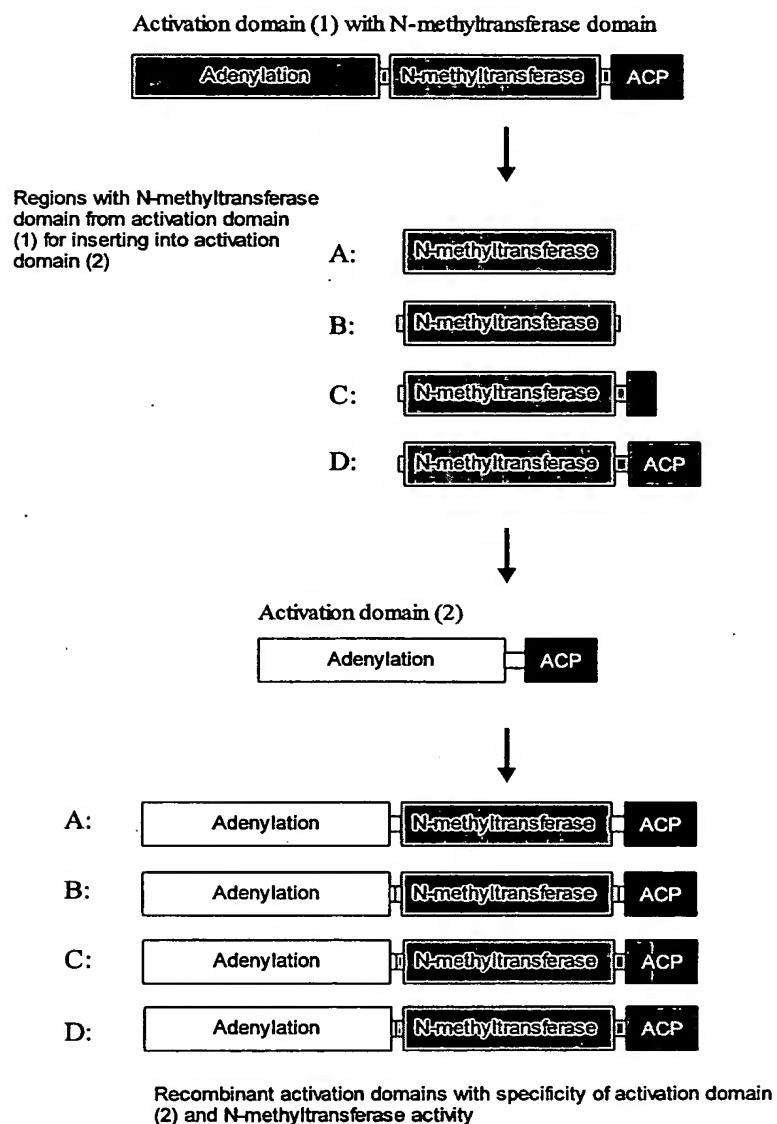
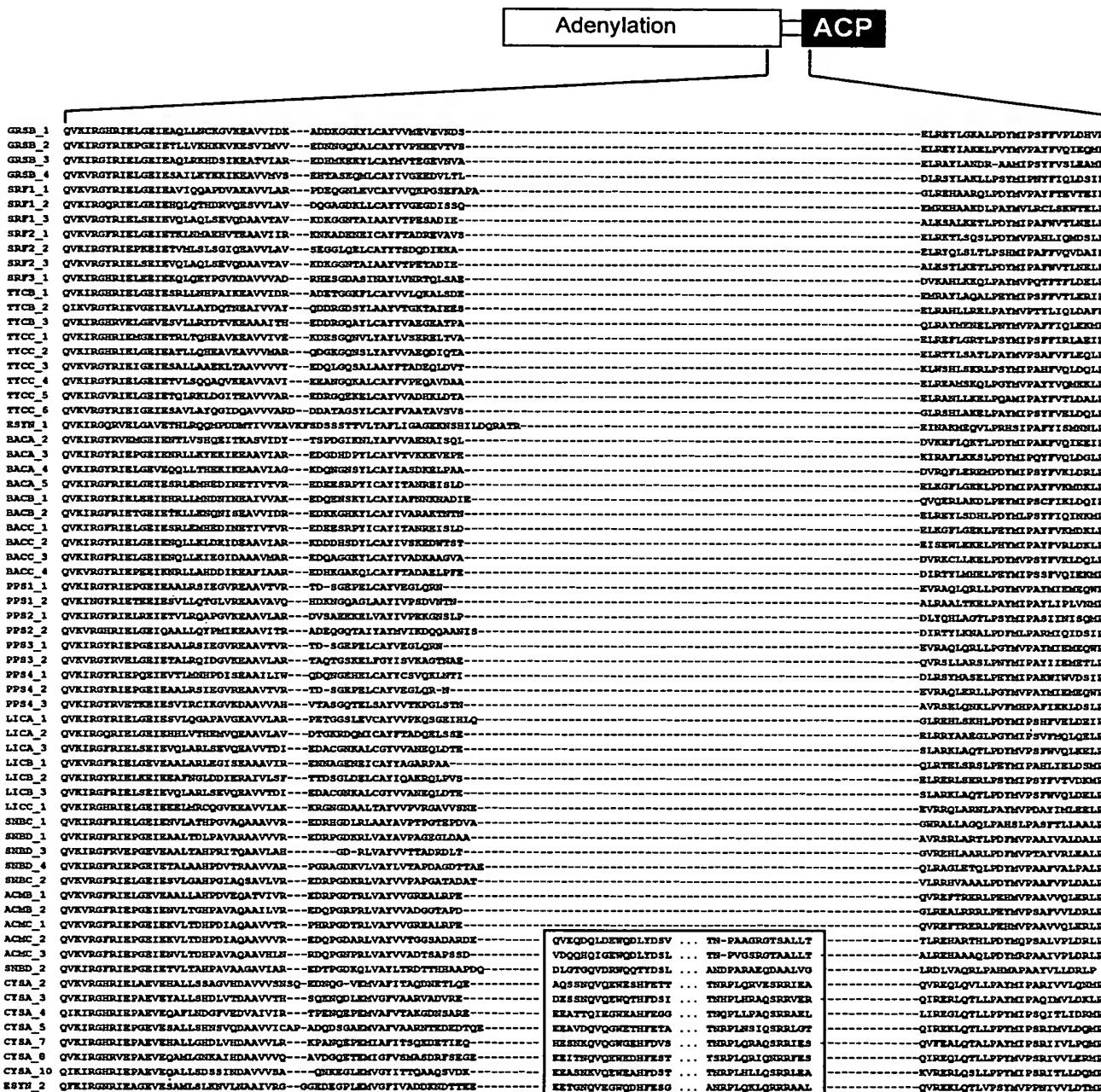


Fig. 3: Sequence comparison of selected activation domains at the transition towards the N-m thyltransferase domains



core motif 5

N-methyltransferase domains

consensus sequence
at the transition:

Part of the sequence at the
N-terminal and C-terminal ends
of the domains)

QIREExVxxxLPXYMVP
EV L I
D

CYS A	Cyclosporine Synthetase from <i>Tolypocladium niveum</i> (Z28382)
GRS A,B	Gramicidin S Synthetase I,II from <i>Bacillus brevis</i> (P14687/P14688)
ACM B,C	Actinomycin Synthetase II,III from <i>Streptomyces chrysomallus</i> (AF047717 and attached sequence)
BAC A,B,C	Bacitracin Synthetase A,B,C from <i>Bacillus licheniformis</i> (AF007865)
TYC A,B,C	Tyrocidin Synthetase I,II,III from <i>Bacillus brevis</i> (AF004835)
LIC A,B,C	Lichenysin Synthetase A,B,C from <i>Bacillus licheniformis</i> (U95370)
ESYN	Enniatin Synthetase from <i>Fusarium scirpi</i> (Z18755: Update year 2000)
SNB C,D	Pristinamycin I Synthetase C,D from <i>Streptomyces pristinaespiralis</i> (Q54959,X98690)
SRF 1,2,3	Surfactin Synthetase 1,2,3 from <i>Bacillus subtilis</i> (P27206,Q04747,Q08787)
PPS 1,2,3,4	Fengycin Synthetase 1,2,3,4 from <i>Bacillus subtilis</i> (Z34883)

The index following the name designates the number of the activation domain within the corresponding PPS (started from the N-terminus). The data base numbers of the sequences in "GenBank" or "SwissProt" are given in parenthesis.

Figure 4: Starting plasmids for the construction according to the Examples

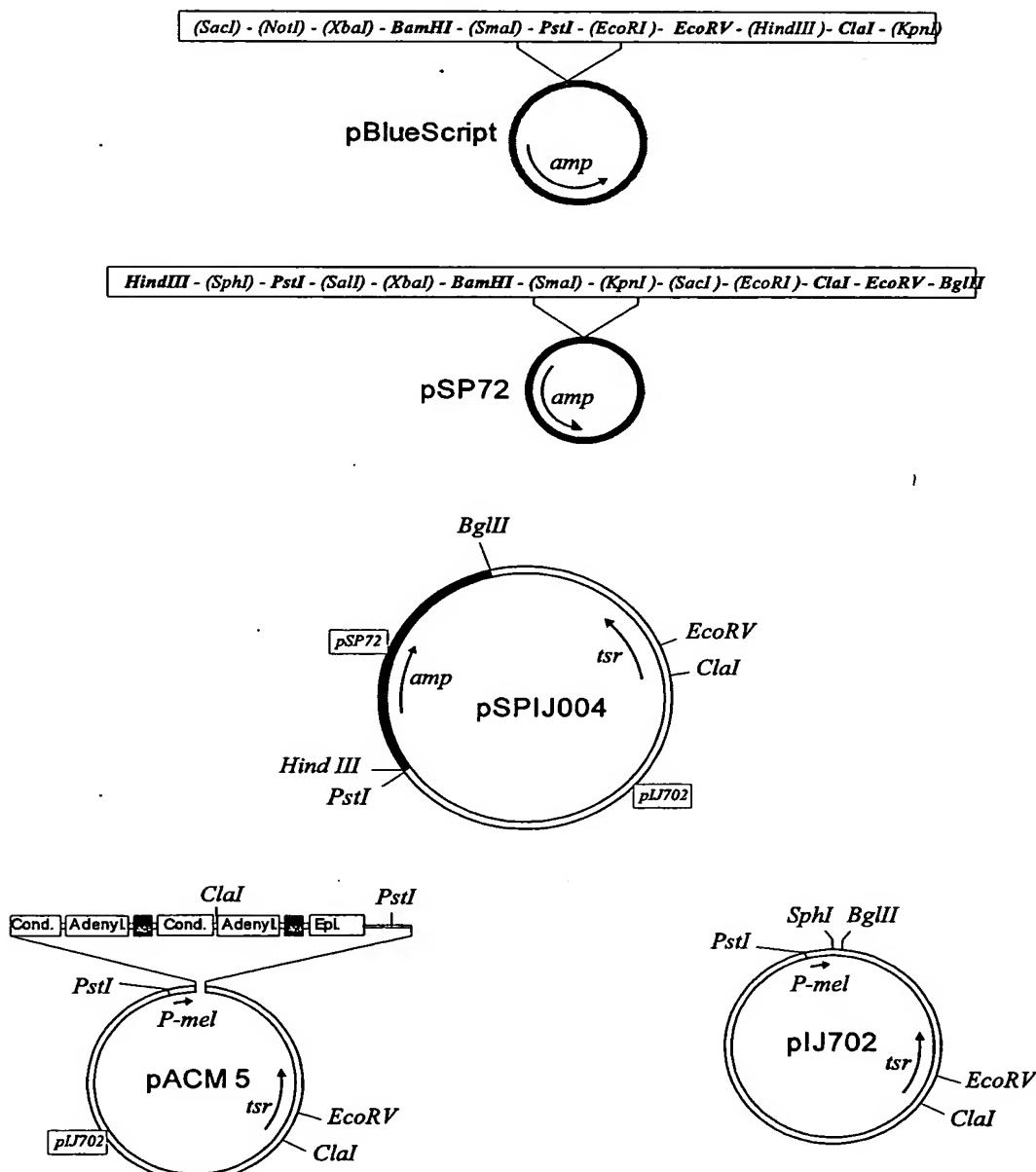


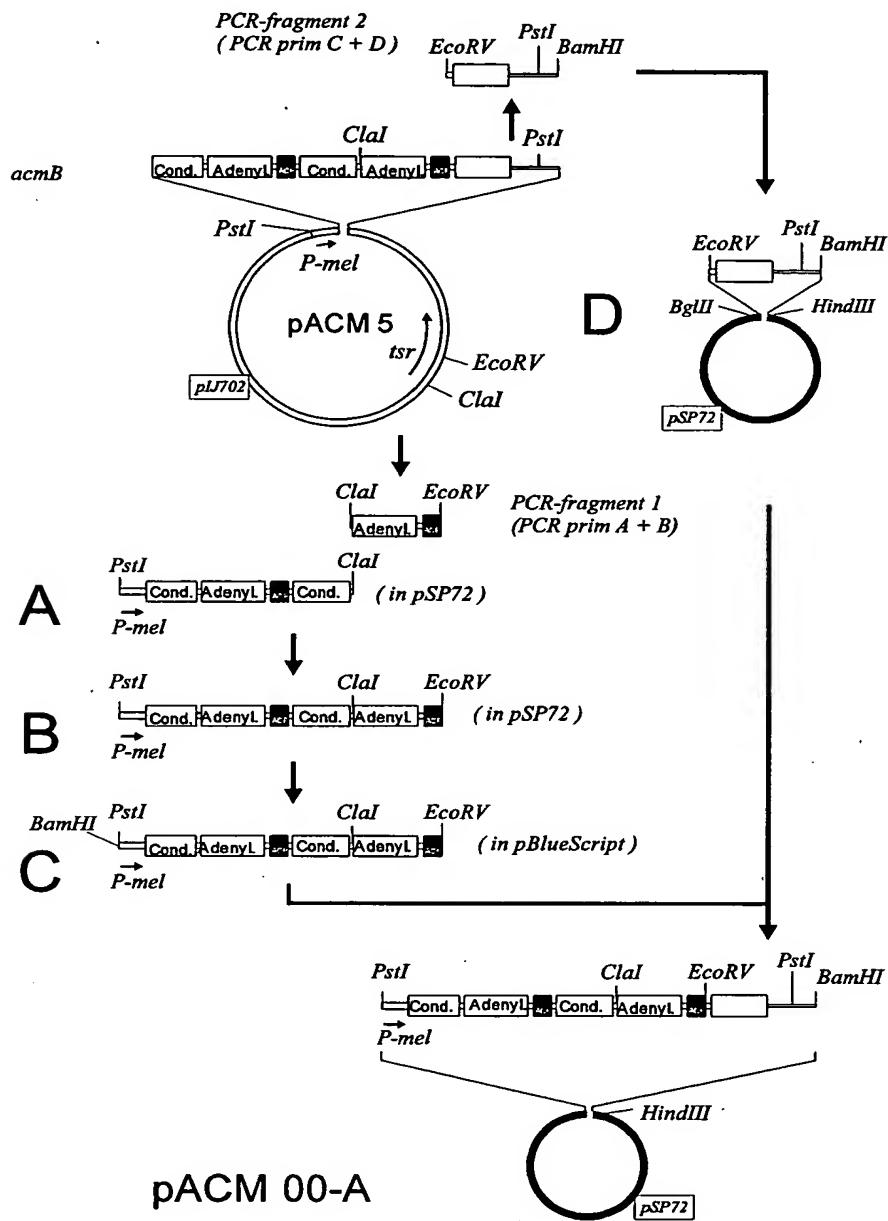
Figure 5: Introduction of an *EcoRV* restriction site into *acmB*

Figure 6: Cloning of *Clal*-*EcoRV* cassettes for the construction of recombinant *acmB* genes

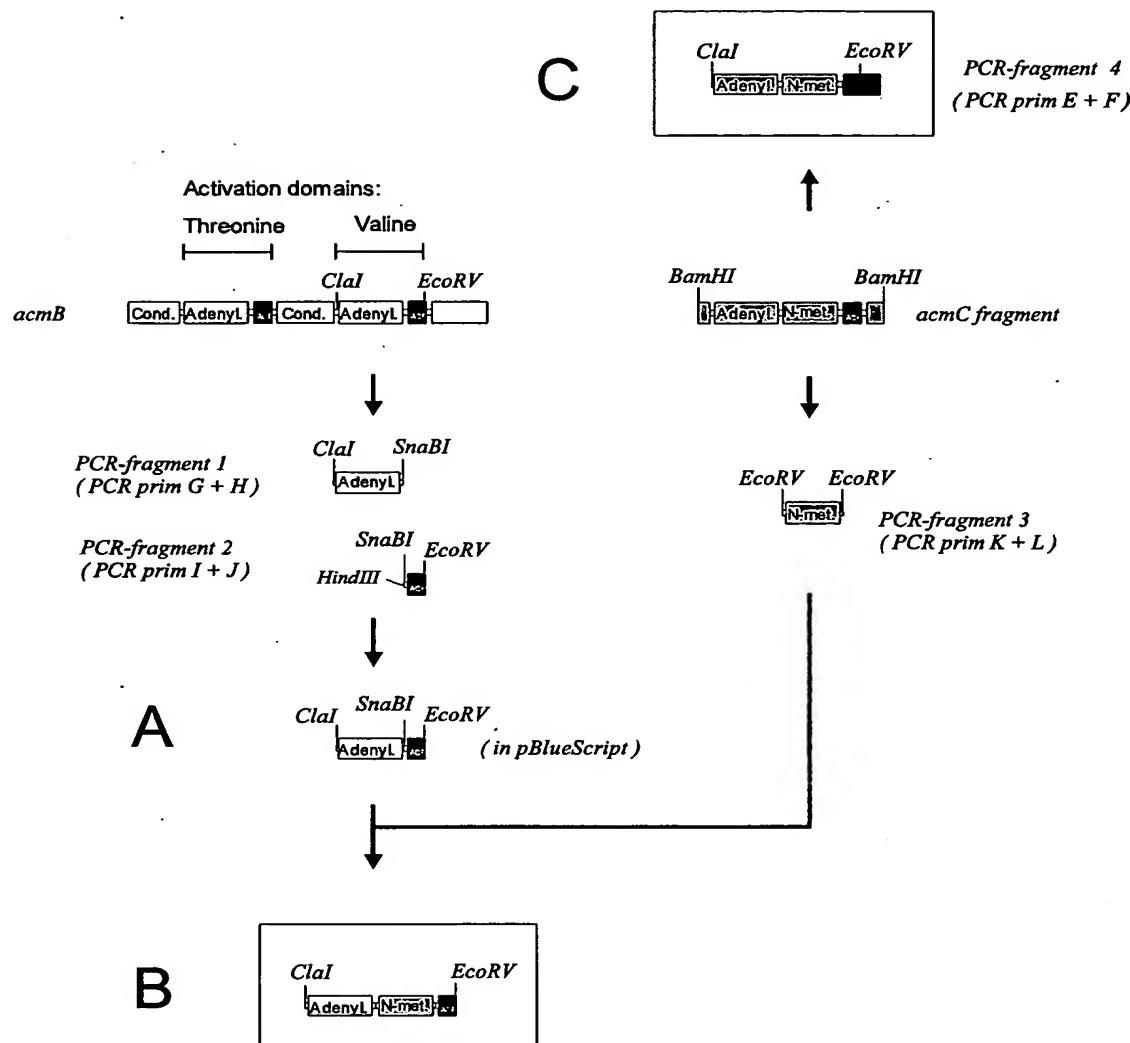


Figure 7: Plasmids for expression of the recombinant PPS genes

